

### **REMARKS/ARGUMENTS**

This is a reply to the Final Office Action dated January 18, 2008.

#### **Status of Claims**

Claims 1-3, 6-12, and 14-17 are currently pending in this application. Claims 4, 5 and 13 have been canceled. Claims 1, 6, 7 and 11 are presently amended.

#### **Claim Amendments**

Claims 1, 6, 7 and 11 are amended to clarify that the nonwoven fabric exhibits drape and conforms to any cleanable surface (see page 1, lines 6-7; page 2, lines 24-25; page 6, line 6).

No new matter has been introduced.

#### **Response to 35 U.S.C. § 103(a) Rejection of Claims 1-3, 6, 8-12 and 14-17 Based on Oathout and Palm et al.**

In the most recent Final Office Action, Claims 1-3, 6, 8-12, and 14-17 have been rejected under 35 U.S.C. § 103(a) as obvious over Oathout (USP 5,459,912) in view of Palm et al. (U.S. Pat. No. 5,776,353).

The Final Office Action is understood to state that it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have subjected the clean room wipe of Oathout to the method of removing contaminants taught by Palm et al. with the expectation that this washing, rinsing and drying process would remove soluble contaminants from the wipe of Oathout. This rejection is respectfully traversed.

Oathout has no teaching about sodium ion content nor sodium ion content problems with respect to clean room fabric wipes, nor how to address the problem in the manner presently claimed and provide the unique fabric wipe products as presently claimed.

Palm et al. is unrelated to the claimed invention because it is directed to a rigid, sintered, static, composite filtration media that can be used for filtration applications. Contrary to the assertion made on page 5 of the Final Office Action, Palm et al. does not teach use of acid washing processes to remove contaminants from clean room materials. Filtration media are not relevant to clean room fabric wipes or methods of making them. Instead, Palm et al. teaches acid

treatment of abrasive sintered composite materials that can be made with abrasive fibers. An acid washing procedure that can work on a rigid, sintered, static, composite filtration media, such as taught in Palm et al., does not teach, suggest or predict its success for nonwoven fabric materials, and particularly not nonwoven fabric materials that are drapeable and conform to surfaces being cleaned.

The Final Office Action (page 6) urges that Palm et al. teaches the particles can be in the form of fibers, and further urges that Palm et al. teaches fiberglass substrates, which is allegedly a nonwoven fabric structure (no citation given).<sup>1</sup> In reply, attention is kindly directed to Example 7 in Palm et al., which clearly teaches that the fiberglass is used in a mixture with natural diatomite, and the resulting mixture is *sintered in a furnace* to form the “advanced composition filtration media” (see col. 18, line 57 to col. 19, line 11). Palm et al. would wash this sintered media product material, not the pre-sintering starting materials. The product of Example 7 in Palm et al. is certainly not a nonwoven fabric structure, nor is such a nonwoven fabric structure described anywhere in the Palm et al. reference. Thus, Palm et al. does not teach use of fiberglass in fabric structures, nor that the acid washing procedure disclosed therein is applicable to fabric materials made with any fiber type.

Also, one of ordinary skill in the art would not have been motivated nor have an expectation of success in trying to use relatively abrasive fiberglass fibers and their treatments *per* Palm et al. in Oathout’s clean room wipers. Fiberglass fibers would be expected to *damage or harm* surfaces wiped with them. Thus, the use of fiberglass (fibers) in the manufacture of composite filtration media structures of Palm et al. actually *teaches away* from the modification of Oathout that was proposed in the Final Office Action.

The fact that an acid washing procedure in Palm et al. can work on a rigid, sintered, static, composite filtration media, does not teach, suggest or predict success in drapeable, absorbent, and surface conforming nonwoven fabrics. Reference is further made to the Declaration under 37 C.F.R. §1.132 of Diane B. Ellis, which is concurrently submitted, in this respect and for the record. As explained in the Ellis Declaration, unlike the rigid composite media products disclosed by Palm et al., the acid-washed nonwoven fabric wipes of the present invention are drapeable and can conform well to any cleanable surface in a nonabrasive manner.

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<sup>1</sup> A keyword search of the Palm et al. patent for each of the terms “fabric” and “nonwoven” revealed no instances where they were used in this patent.

The *Obiaya* decision of the PTO Board, referenced at page 5 of the Final Office Action, is not instructive or controlling here. That decision is understood to presuppose that a *prima facie* case has been properly established by the examiner before the question regarding inherent advantages or latent properties is reached. However, the applicant respectfully submits that the establishing of a *prima facie* case by the examiner is in dispute in the present case from the applicant's standpoint. That is, in view of reasons set forth herein, the applicant disagrees with the Patent Office that the Oathout, Palm et al. and/or Bahten. references are properly combinable to render the present claims *prima facie* obvious. Therefore, the applicant submits that any assumptions and speculation about inherent or latent properties or advantages of a hypothetical combination of these references are premature and not appropriate. Thus, the *Obiaya* decision is not instructive or controlling here.

The Final Office Action (page 2) also indicates that it is noted that it is known in the art of clean room wipes that is desirable to remove contaminants from the wipe. The applicant disagrees with that assertion in the absence of any factual evidence being cited in support of the proposition. Avoiding or reducing usage of fabric additives such as surfactants that may introduce sodium ions into a clean room fabric because they can introduce undesirable effects, which may have been known, is not the same thing as a desire for reducing existing sodium content already present in a clean room fabric which is the context of and problem solved by the present invention.

In view of at least the above reasons, the applicant respectfully submits that the proposed combination of Oathout and Palm et al. does not render the present claims *prima facie* obvious.

In view of at least the above, reconsideration and withdrawal of the rejection is respectfully requested.

Response to 35 U.S.C. § 103(a) Rejection of Claims 1-3, 6, 8-12 and 14-17 Based on Oathout, Bahten and Palm et al.

Claims 1-3, 6, 8-12 and 14-17 have been rejected under 35 U.S.C. § 103(a) as obvious over Oathout in view of Bahten (USP 6,182,323), and further in view of Palm et al.

Among other indications, the Final Office Action is understood to state that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have subjected the clean room wipe of Oathout to the acid washing, rinsing and drying steps of Bahten, motivated by the expectation that these additional process steps would remove additional impurities from the clean room wipe of Oathout, and that Bahten teaches the process steps are exemplary and can be changed in sequence or steps can be removed. The Final Office Action also states that Palm et al. evidences it was known in the art to perform acid washing, rinsing and drying alone as a method for removing contaminants from articles, and that Palm et al teaches acetic acid was recognized in the art as equivalent to citric acid. This rejection is respectfully traversed.

As noted, Oathout has no teaching about sodium ion content problems with respect to clean room *fabric* wipes, nor how to address the problem in the manner as presently claimed.

Bahten, like Palm et al., has nothing to do with fabric materials.

In reply to applicant's argument that Bahten is drawn to foams and sponges, the Examiner is understood to urge that Bahten teaches that the materials can be in the form of "wipes", rather than foams, brushes and sponges, and directs attention to column 3, lines 24-25 of the reference. Apparently, the suggestion in the Office Action is that the term "wipes" implicitly means fabrics including nonwoven fabrics to one of ordinary skill in the art. Bahten never uses the term fabric or nonwoven.

The applicant responds that wipe 105 in Bahten is *only* described as a foam or sponge product. Attention is directed to the descriptions at col. 3, lines 10-17 of Bahten which state, in regard to *all* the teachings of Figure 1 (inclusive of wipes 105), that:

FIG. 1 is a simplified diagram of surface treatment devices according to embodiments of the present invention. ... As shown, the devices or porous polymeric products (e.g., foam or sponge products) can range in size and shape, depending on the application.

It is common knowledge that kitchen and household cleaning sponges are often called “wipes,” and that is how Bahten would be understood by a person of ordinary skill in the art to be using the terminology. Indeed, as taught above, Bahten only uses the term for foams and sponges, not fabrics or nonwovens. Further, Bahten states that the device can be in the form of puck brushes 111 and plugs 113 (col. 3, lines 24-26). These devices further emphasize that the products of Bahten, including wipes 105, are constructed of relatively rigid, self-supporting, drapeless porous foams and sponge materials, not fabric materials. Furthermore, in one illustrative embodiment, Bahten refers to using “commercial dish washing machines” in which the porous polymeric or sponge products are loaded for wash and rinse cycles (col. 7, lines 17-37). Clearly, Bahten is describing the treatment of relatively rigid or self-supporting articles, and not fabric type materials.

The fact that a cleaning procedure in Bahten may work on relatively rigid static porous cellular structures such as foams and sponge members, does not teach, suggest or predict success in drapeable nonwoven fabrics that conform to any cleanable surface. They are completely different classes of materials. Reference is again made to the currently submitted Ellis Declaration under 37 C.F.R. §1.132, which provides additional evidence on this factual issue. Unlike the stiff self-supporting wipe products disclosed by Bahten, the nonwoven fabrics of Oathout, and the acid-washed nonwoven fabric wipes of the present invention, are drapeable and can conform well to any cleanable surface in a nonabrasive manner.

As to Palm et al., as pointed out above, an acid washing procedure that can work on a rigid sintered static composite filtration media material does not suggest or predict its success on nonwoven fabrics.

The argument in the Final Office Action that Bahten allows for changes in the sequence of steps or removal steps (at col. 12, lines 33-45) does not address the fact that Bahten fails to provide an enabling disclosure for any different process that might omit the solvent wash, caustic wash and/or chelation wash steps and/or changes the sequence of steps described at columns 7 and 9-12 of that reference, such that one of ordinary skill would have reasonably predicted that any such changed process scheme would successfully achieve a sodium ion content of less than 45 ppm (or less than 25 ppm) *in a nonwoven fabric* as required in the present claims. There is no reasonable expectation of success to be drawn from the factual evidence record that any changed versions of Bahten's process, as hypothetically applied to Oathout, will yield a nonwoven fabric as presently claimed. Indeed, Bahten nowhere teaches, suggests or supports a prediction of success that the disclosed contamination removal treatments for porous polymeric device treatments, or a hypothetical lesser included combination of the process steps, can be successfully applied to any *textile products* for providing very low impurity levels as presently claimed.

With respect to the reference to Wallis et al. at pages 6-7 of the Final office Action,<sup>2</sup> this reference is not relevant. Wallis et al. does not teach washing wipes with either acetic acid or citric acid as apart of a process to reduce sodium ion content in the wipe. Instead, Wallis et al. is impregnating a wipe with an organic acid so that the resulting wet wipe can be used to neutralize caustic in spilled chemicals (col. 3, lines 26-50). The reason for impregnating the wipe with acid in Wallis et al. is to keep and store the acid in the wipe until wipe is used for caustic chemical cleanup and neutralization. Thus, by design, *the acid is left in the Wallis wipe* and is never rinsed out before use. As can be appreciated, *any sodium ions would still be retained* within the acid-impregnated Wallis wipe. Therefore, Wallis et al. *teaches away* from the present invention.

In view of at least the above reasons, the applicant respectfully submits that the proposed combination of Oathout, Bahten and Palm et al. does not render the present claims *prima facie* obvious.

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<sup>2</sup> M.P.E.P. § 706.02(j) ("Where a reference is relied on to support a rejection, whether or not in a minor capacity, that reference should be positively included in the statement of the rejection. See *In re Hoch*, 428 F.2d 1341, 1342 n.3 166 USPQ 406, 407 n. 3 (CCPA 1970)").

In view of at least the above, reconsideration and withdrawal of the rejection is respectfully requested.

Response to 35 U.S.C. § 103(a) Rejection of Claim 7 Based on Oathout, Palm et al., Bahten and Kwok et al.

Claim 7 has been rejected under 35 U.S.C. § 103(a) as obvious over Oathout in view of Palm et al., or in view of Bahten and Palm et al. as applied to claims 1-3, 6, 8-12, 14-17, and further in view of Kwok et al. (USP 5,093,190).

Among other indications, the Final Office Action states that Oathout, Bahten and Palm et al. do not teach employing a vacuum during the washing process, and Kwok et al. teaches that employing a vacuum to dewater a nonwoven web for use as a clean room wipe reduces the amount of contaminants in the web. The Final Office Action states it would have been obvious to one of ordinary skill at the time the invention was made to have employed vacuum in the acid washing processes of Palm et al. and Bahten, with expectation that this would increase the amount of contaminants removed. This rejection is respectfully traversed.

Kwok et al. discloses a vacuum dewatering extractor 19 used on a spunlaced fabric in which the workpiece is in continuous fabric form for conveyance over the extractor for processing at that station (col. 3, lines 1-8; Fig. 2). This vacuum system is not relevant to any materials other than textiles of the type processed in Kwok et al. One of ordinary skill in the art would not have reasonably considered using Kwok et al.'s continuous fabric dewatering system on discrete sponges and foam articles *per* Bahten or rigid sintered composite media *per* Palm et al. They are completely different types of materials from each other.

In view of at least the above reasons, the applicant respectfully submits that the proposed combination of Oathout, Bahten, Palm et al. and Kwok et al. does not render the present claims *prima facie* obvious.

In view of at least the above, reconsideration and withdrawal of the rejection is respectfully requested.

It is believed that this application is in condition for allowance, and notice of such is respectfully requested.

U.S. Patent Application No. 10/650,584  
Amendment Submitted With RCE  
Reply to Final Office Action dated January 18, 2008

If the Examiner believes that a teleconference would be useful in expediting the prosecution of this application, the official is kindly invited to contact Applicant's undersigned representative of record.

Respectfully submitted,

/Ramon R. Hoch/

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